What is claimed is:

1. A composite sheet comprising:

a nonwoven fabric including nonelastic fibers aligned in one direction and having elongation of 100% or higher in a direction cross to the aligned direction of said nonelastic fibers; and

a rubber elastic material bonded onto said nonwoven fabric in a pattern having orientation cross to the aligned direction of said nonelastic fibers.

2. The composite sheet according to claim 1, wherein said rubber elastic material is in the form of strands of a thermoplastic elastomer aligned cross to the aligned direction of said nonelastic fibers.

3. The composite sheet according to claim 2, wherein said strands of the thermoplastic elastomer are bonded onto said nonwoven fabric with space between them.

4. The composite sheet according to claim 3, wherein said strands are aligned substantially in parallel.

5. The composite sheet according to claim 4, wherein said fibers are aligned longitudinally in said nonwoven fabric and said strands are aligned transversely

in said nonwoven fabric.

6. The composite sheet according to claim 4, wherein said fibers are aligned transversely in said nonwoven fabric and said strands are aligned longitudinally in said nonwoven fabric.

7. The composite sheet according to claim 1, wherein said pattern includes air permeable portions in long shape in a direction cross to the aligned direction of said nonelastic fibers.

8. The composite sheet according to claim 7, wherein said rubber elastic material is a web including a thermoplastic elastomer and including air holes as said air permeable portions.

9. The composite sheet according to claim 8, wherein said web is bonded onto said nonwoven fabric after said web is held at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer to eliminate its contractile force in a state where said web is elongated cross to the aligned direction of said nonelastic fibers.

10. The composite sheet according to claim 9,

wherein said web is a film including openings long in a direction cross to the aligned direction of said nonelastic fibers, as said air holes.

11. The composite sheet according to claim 9, wherein said web is a nonwoven fabric including thermoplastic elastomer fibers aligned cross to the aligned direction of said nonelastic fibers.

12. The composite sheet according to claim 7, wherein said rubber elastic material is formed by heating powder of a thermoplastic elastomer applied onto said nonwoven fabric in said pattern at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer to bring said thermoplastic elastomer into close contact with said nonwoven fabric.

13. A method of manufacturing a composite sheet comprising the steps of:

composing a nonwoven fabric including nonelastic fibers aligned in one direction; and

bonding a rubber elastic material onto said nonwoven fabric with orientation cross to the aligned direction of said nonelastic fibers.

14. The method of manufacturing a composite sheet

according to claim 13, wherein said step of composing the nonwoven fabric includes aligning said nonelastic fibers in a longitudinal direction of a nonwoven fabric to be formed; and

said step of bonding the rubber elastic material includes aligning strands of a thermoplastic elastomer in a width direction of said nonwoven fabric.

15. The method of manufacturing a composite sheet according to claim 14, wherein said bonding step includes:

forming said nonwoven fabric into a cylindrical shape;

moving said nonwoven fabric formed into a cylindrical shape in the axis direction of said cylindrical shape;

attaching a plasticized thermoplastic elastomer to an inner surface of said nonwoven fabric on the move along a circumference of said cylindrical shape; and

move solidifying the plasticized thermoplastic elastomer attached to said nonwoven fabric to provide said rubber elastic material.

16. The method of manufacturing a composite sheet according to claim 15, wherein said step of forming said

nonwoven fabric into a cylindrical shape includes:

preparing a forming portion including a cylinder, said nonwoven fabric being supplied to an inner surface of said cylinder; and

supplying said nonwoven fabric along an inner surface wall of said cylinder.

17. The method of manufacturing a composite sheet according to claim 16, wherein said step of attaching a plasticized thermoplastic elastomer to an inner surface of said nonwoven fabric formed into a cylindrical shape includes:

preparing a rotary spinning head portion in a central portion of said cylinder, said rotary spinning head portion being supplied thereinto with said plasticized thermoplastic elastomer and being provided with a nozzle opened in its outer peripheral surface; and

rotating said rotary spinning head portion at the same time spinninging said plasticized thermoplastic elastomer from said nozzle to attach said thermoplastic elastomer to said nonwoven fabric supplied into said cylinder and moving therein.

18. The method of manufacturing a composite sheet according to claim 15, wherein said step of composing the nonwoven fabric includes aligning said nonelastic fibers

in a width direction of a nonwoven fabric to be formed; and

said step of bonding the rubber elastic material includes aligning strands of a thermoplastic elastomer in a longitudinal direction of said nonwoven fabric.

19. The method of manufacturing a composite sheet according to claim 15, further comprising the steps of:

forming a web including a thermoplastic elastomer and including air holes;

elongating said web in one direction; and

heating said elongated web at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer to eliminate a contractile force of said web,

and wherein said step of bonding the rubber elastic material includes bonding said web with contractile force eliminated to said nonwoven fabric such that the aligned direction of said nonelastic fibers is cross to the elongation direction of said web.

20. The method of manufacturing a composite sheet according to claim 19, wherein said step of forming a web includes:

preparing a film including a thermoplastic

elastomer; and

forming slits which are to serve as said air holes in said film.

21. The method of manufacturing a composite sheet according to claim 20, wherein said step of forming said slits includes forming slits long in the elongation direction of said web.

22. The method of manufacturing a composite sheet according to claim 15, wherein said step of bonding the rubber elastic material includes:

preparing powder of a thermoplastic elastomer;

attaching said powder to said nonwoven fabric in a pattern having orientation cross to the aligned direction of said nonelastic fibers and having air permeable portions;

heating said nonwoven fabric with said powder attached thereto at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer; and

pressing said nonwoven fabric heated at a temperature equal to or higher than the flow beginning temperature of said thermoplastic elastomer to said powder.

23. The method of manufacturing a composite sheet according to claim 22, wherein said step of attaching said powder to said nonwoven fabric includes:

applying a liquid to said nonwoven fabric in said pattern; and

dispersing said powder on said nonwoven fabric with said liquid attached thereto.

24. The method of manufacturing a composite sheet according to claim 15, wherein said step of bonding the rubber elastic material includes:

applying a liquid including a material constituting said rubber elastic material and including a cross-linking agent added thereto onto said nonwoven fabric in a pattern having orientation cross to the aligned direction of said nonelastic fibers and having air permeable portions; and

drying said nonwoven fabric having said liquid applied thereto.

25. The method of manufacturing a composite sheet according to claim 24, further comprising the step of performing heat treatment to said nonwoven fabric having said liquid applied thereto for promoting reaction of said cross-linking agent.

26. A elastic web comprising one or a plurality of laminated elongated webs with its contractile force eliminated in an elongated state by holding one or a plurality of material webs including a thermoplastic elastomer and having air holes at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer in the elongated state.

27. The elastic web according to claim 26, wherein said material web is a nonwoven fabric including thermoplastic elastomer fibers.

28. The elastic web according to claim 26, wherein said material web is a film with holes including a thermoplastic elastomer.

29. The elastic web according to claim 26, wherein said material web is elongated in one direction and the air holes of said material web are slits long in the elongation direction.

30. The elastic web according to claim 26, wherein each of said plurality of material webs is elongated in one direction, the elongation directions of said material webs being the same or different from one another, and said plurality of elongated webs are laminated such that

the elongation directions intersect.

31. A method of manufacturing a elastic web comprising the steps of:

forming one or a plurality of material webs including a thermoplastic elastomer and including air holes;

elongating said material web in at least one direction; and

heating said elongated web at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer to eliminate a contractile force of said material web in the elongated state.

32. The method of manufacturing a elastic web according to claim 31, wherein said step of forming a material web includes forming a nonwoven fabric including thermoplastic elastomer fibers.

33. The method of manufacturing a elastic web according to claim 31, wherein said step of forming a material web includes forming holes in a film including a thermoplastic elastomer.

34. The method of manufacturing a elastic web according to claim 33, wherein said holes are slits, and

said step of elongating said material web includes elongating said film in a longitudinal direction of said slits.

35. The method of manufacturing a elastic web according to claim 31, wherein said step of elongating material webs includes elongating each of said plurality of material webs in one direction, the elongation directions of said material webs being the same or different from one another, and the method further comprising the step of overlaying said plurality of material webs with their contractile force eliminated such that the elongated directions intersect.

36. The method of manufacturing a elastic web according to claim 31, wherein said step of elongating a material web includes elongating said material web at a temperature lower than the flow beginning temperature of said thermoplastic elastomer.

37. The method of manufacturing a elastic web according to claim 31, further comprising the step of heat-pressing said material web in a state where said material web is heated at a temperature equal to or higher than the flow beginning temperature of said thermoplastic elastomer.

38. An apparatus for manufacturing a composite sheet comprising:

a spinning unit for spinning nonelastic fibers to form a nonwoven fabric having said fibers aligned in one direction;

a stretching unit for stretching the nonwoven fabric formed by said spinning unit in the same direction as the aligned direction of said fibers; and

a bonding unit for bonding a rubber elastic material onto the nonwoven fabric stretched by said stretching unit with orientation cross to the aligned direction of said fibers.

39. The apparatus for manufacturing a composite sheet according to claim 38, wherein said spinning unit includes a plurality of nozzles arranged in a width direction of a nonwoven fabric to be formed for discharging a material of said fibers in a plasticized state and carrying means for carrying the fibers discharged from said nozzle in the discharge direction of said fibers; and

said bonding unit includes a cylindrical portion supplied with said nonwoven fabric along its inner surface for forming said nonwoven fabric into a cylindrical shape, a moving mechanism for moving said

nonwoven fabric supplied to said cylindrical portion along the axis direction of said cylindrical portion, and a rotary spinning head portion in a central portion of said cylindrical portion, said rotary spinning head portion being supplied thereinto with a plasticized material of said rubber elastic material and being provided with a nozzle opened in its outer peripheral surface.

40. The apparatus for manufacturing a composite sheet according to claim 38, wherein said spinning unit includes a discharge port for discharging a material of said fibers in a plasticized state, dispersing means for dispersing the material of said fibers discharged from said discharge port in a width direction of a nonwoven fabric to be formed, and carrying means for carrying said fibers dispersed from said dispersing means in a longitudinal direction of a nonwoven fabric to be formed; and

said bonding unit includes a nonwoven fabric carrying means for carrying a nonwoven fabric formed by said spinning unit and a nozzle for discharging a material of said rubber elastic material to the nonwoven fabric carried by said nonwoven fabric carrying means.

41. The apparatus for manufacturing a composite

sheet according to claim 38, further comprising an elastic web forming unit for forming said rubber elastic material to be bonded to said nonwoven fabric as a web having air permeable portions.

42. The apparatus for manufacturing a composite sheet according to claim 41, wherein said elastic web forming unit includes elongating means for elongating said web in one direction and heating means for heating said elongated web at a temperature equal to or higher than a flow beginning temperature of a material of said web to eliminate a contractile force of said web, and

said bonding means bonds said web to said nonwoven fabric such that the elongation direction of said web is cross to the aligned direction of the fibers of said nonwoven fabric.

43. The apparatus for manufacturing a composite sheet according to claim 41, wherein said elastic web forming unit includes a cutter for forming slits long in one direction in film made from thermoplastic elastomer, elongating means for elongating the film having said slits formed therein in a longitudinal direction of said slits, and heating means for heating said elongated film at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer to eliminate

a contractile force of said film, and

said bonding means bonds said film to said nonwoven fabric such that the elongation direction of said film is cross to the aligned direction of the fibers of said nonwoven fabric.

44. The apparatus for manufacturing a composite sheet according to claim 38, wherein said bonding unit includes an attacher for attaching powder of a thermoplastic elastomer as a material of said rubber elastic material onto said nonwoven fabric in a pattern having orientation cross to the aligned direction of said fibers and having air permeable portions, a heater for heating said nonwoven fabric with said powder attached thereto by said attachment unit at a temperature equal to or higher than a flow beginning temperature of said thermoplastic elastomer, and a presser for pressing said nonwoven fabric heated by said heating unit and said powder.

45. The apparatus for manufacturing a composite sheet according to claim 44, wherein said attachment unit includes an application roller for applying a liquid to said nonwoven fabric in said pattern and means for dispersing said powder onto said nonwoven fabric with said liquid applied thereto.